



AFCESA A-GRAM

AIR FORCE CIVIL ENGINEER SUPPORT AGENCY



00-21

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AIR FORCE QUALIFICATION TRAINING PACKAGE (AFQTP) VIDEO ELECTRIC DRILL AND ROTARY HAMMER

SYNOPSIS:

We have recently completed a new Structural (3E3X1) qualification training package audiovisual product: *Electric Drill and Rotary Hammer*, PIN 613767. This 39-minute product was transferred to the US Army Visual Information Center (USAVIC) in Tobyhanna PA for automatic distribution to all AF civil engineer organizations. It supports the Air Force Qualification Training Program for home station training. This program standardizes step-by-step procedural guidance on performing specific tasks identified in the Specialty Training Standard portion of the Career Field Education and Training Plan.

ELECTRIC DRILL:

Most of us don't have the luxury of selecting the most appropriate drill to do the job. We have one universal drill that must satisfy the majority of tasks that we have to accomplish. The **preparation** section of this video provides a basic safety orientation and introduces the key features and adjustments required on most drills. This section also stresses the importance of reading and understanding the operator's instruction manual.

The **operational** portion of the video details personal safety equipment requirements and discusses how to



secure the material to be drilled. Various wood and metal projects are drilled to show associated drilling hazards and proper drilling techniques. Tips on drilling pilot holes and lubricating the drill bit are explained in an effort to make drilling operations more efficient and help tools last longer.

ROTARY HAMMER:

Sometimes an electric drill can't be used on tough drilling jobs like masonry and concrete. The electric rotary hammer drill incorporates the best features of an air rotary hammer and an electric drill. This video covers use of a small rotary hammer drill in detail and introduces the viewer to a larger version. Once again, the **safety** segment stresses the importance of reading and understanding the operator's instruction manual. This segment addresses awareness of potential hazards. The **set-up** portion of the video identifies the key features of the rotary hammer drill, like the ON/OFF trigger switch, reversing switch, action switch, and speed control switch. An orientation to the various types of drill bits is also provided to help in selecting the correct bit for the job.

The versatility of the small rotary hammer drill is demonstrated by drilling two completely different types of material to fasten a wooden sill plate to a concrete pad. Holes are drilled in masonry blocks to demonstrate the installation and use of a front handle and drill bit depth rod. Another project shows how to drill a concrete pad to secure a metal paint locker.

A larger combination hammer and breaker are introduced to show the next level of drilling for really large projects. This down and dirty introduction points out all the features of the drill and how to prepare it for a drilling operation. A sliding door stop anchor bolt hole is drilled into a concrete footer.



ACCESSIBILITY:

Additional copies of this and other training audiovisual products can be ordered from USAVIC/JVIA ATTN: ASQV-JVIA-T (USAF) Building #3, 11 Midway Road, Tobyhanna PA 18466-5102. A point of contact at USAVIC is Ms. Maria DiGenova, DSN 795-6543 or FAX 795-6106. Questions regarding home station training audiovisual product automatic distribution should be addressed to Mr. Ralph Gruber, HQ AFCESA/CEOT, DSN 523-6181.

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